

## Case study

### Middle ear adenoma : case report

#### Abstract

Ear and temporal bone rare. Adenomas of the middle ear are even rarer. Although considered benign tumours, they carry a risk of recurrence and malignant transformation.

We present the case of a 37-year-old patient with a hypoacusis of the left ear with purulent otorrhea on a non-marginal tympanic perforation as symptomatology.

The audiogram showed a transmission deafness and the scanner found a fleshy attic mass with a preserved ossicular chain.

The patient underwent antro-atticotomy with mass excision, the anatomopathological result of which was in favour of an adenoma of the middle ear.

Key words: adenoma – middle ear – atticotomy

#### Introduction

Ear tumours form a heterogeneous group whose diagnosis must be evoked in the face of any unilateral damage (hearing, vestibular), any duct polyp or unfavourable development of a usual treatment must lead to an auditory examination. The adenoma of the middle ear is a benign tumour, but there is a risk of recurrence and malignant transformation.

#### CASE PRESENTATION:

37-year-old patient consulting for recurrent left ear infections associated with hearing loss.

Otoscopy find the presence of purulent otorrhea on a non-marginal tympanic perforation and a fleshy polyp in the middle ear.

Acumetry and audiogram find transmission deafness.

A CT scan of the rocks was performed which resulted in the presence at the attic level of a fleshy filling with a continuous ossicular chain.

The patient underwent antro-atticotomy with mass removal, the anatomopathological result of which was in favour of an adenoma of the middle ear. Post-operative follow-up was normal.

#### Discussion

Middle ear adenoma (sometimes incorrectly called "carcinoid tumor" or "ceruminoma") is a rare benign epithelial tumor; only about 100 cases are reported, with a small (<10mm), well-limited size (1, 2). It is derived from pluripotent epithelial cells of the middle ear mucosa, of endodermal origin, which have a double capacity of exocrine differentiation (cells with mucosal secretion granules) and neuroendocrine differentiation (cells with neurosecretory granules). The average age of onset is between 20 and 40 years. The most common symptoms are hearing loss, fullness of the ear, tinnitus and otorrhea. Dizziness and peripheral facial paralysis are more rarely reported. Clinical examination may reveal non-pulsatile retrotympanic greyish mass. The eardrum is rarely invaded by the tumor. The main differential diagnoses are usually eliminated by preoperative imaging (CTM and MRI): paraganglioma, cholesteatoma, or much more rarely schwannoma of the tympanic segment of the facial nerve, meningioma, etc. In CT, adenoma occurs as a mass of the eardrum cage that may affect the patient. Involvement of the ossicular chain. Mastoid extension, ossicular lysis and bone erosion – including the tegmen rupture as described in our clinical case – are rare. In MRI, the lesion is elevated after gadolinium injection and is not hypersignal on the diffusion sequences, distinguishing it from the

cholesteatoma. Given the rarity of these lesions and the lack of specific clinical presentation, the diagnosis is rarely mentioned in the preoperative period. The treatment is surgical removal, sometimes with the need for an ossicular sacrifice to allow complete removal (2). The diagnosis is then confirmed by histological and immunohistochemical examination. Recurrences after complete removal are rare(3).

Conclusion :

Adenoma of meddel ear is a rare entity, he should be included in the diagnosis of any tumour of ear.



Fig1 : CT sacn showing the adenoma in middel ear



Fig 2 : the adenoma after mastoidectomy

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